

Fig. 1

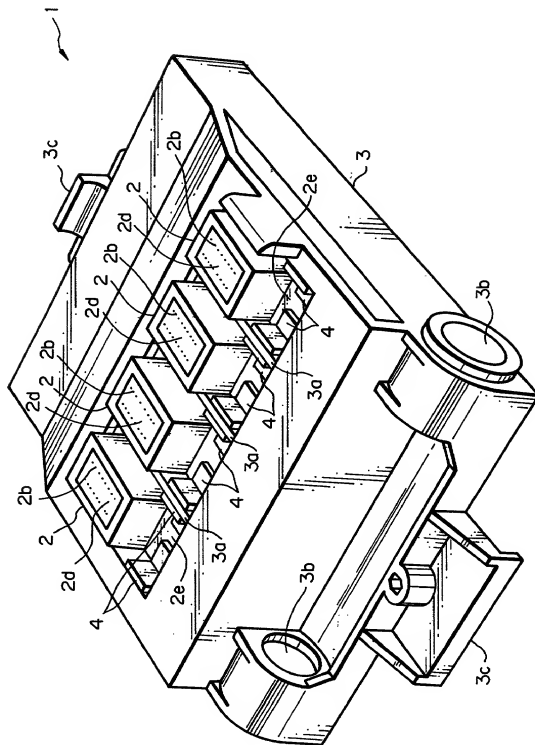


Fig. 2

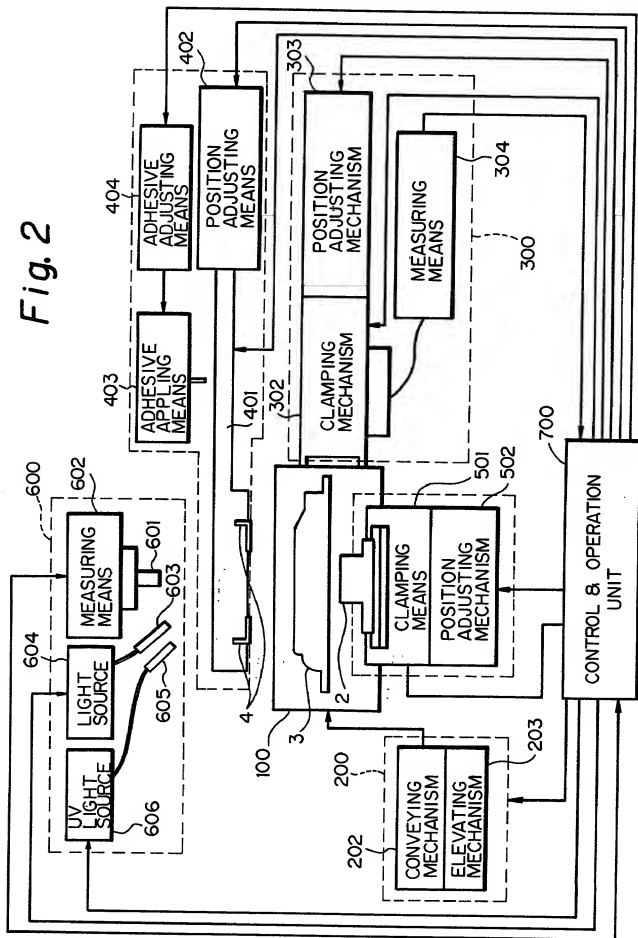


Fig. 3

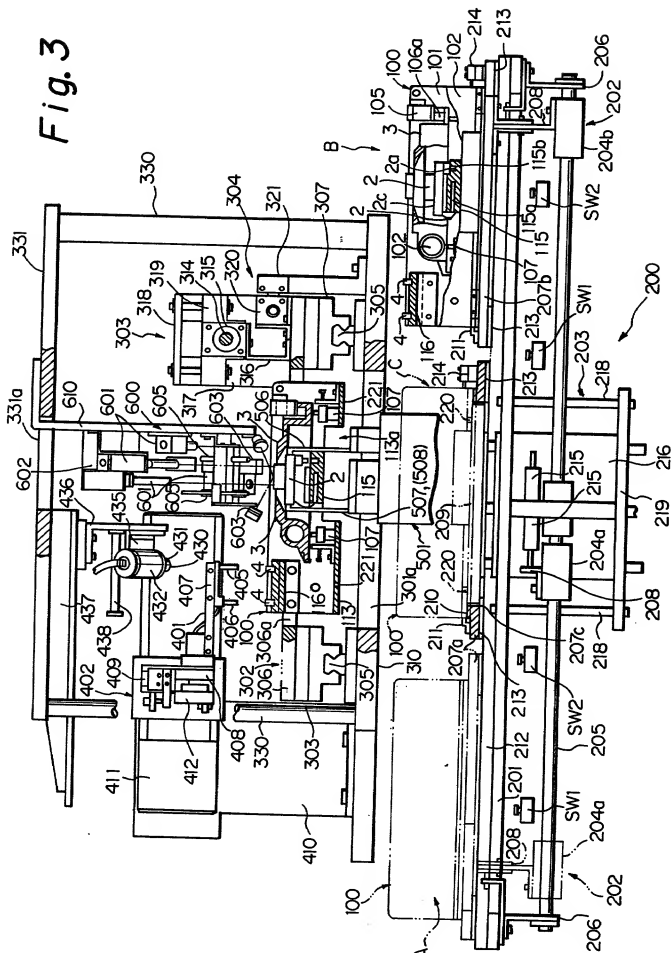


Fig. 4

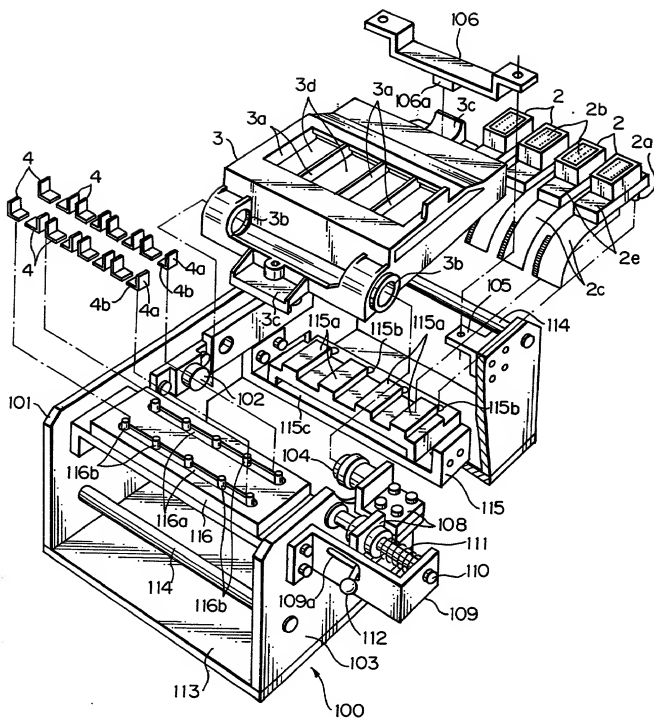


Fig. 5A

Fig. 5

Fig. 5A

Fig. 5B

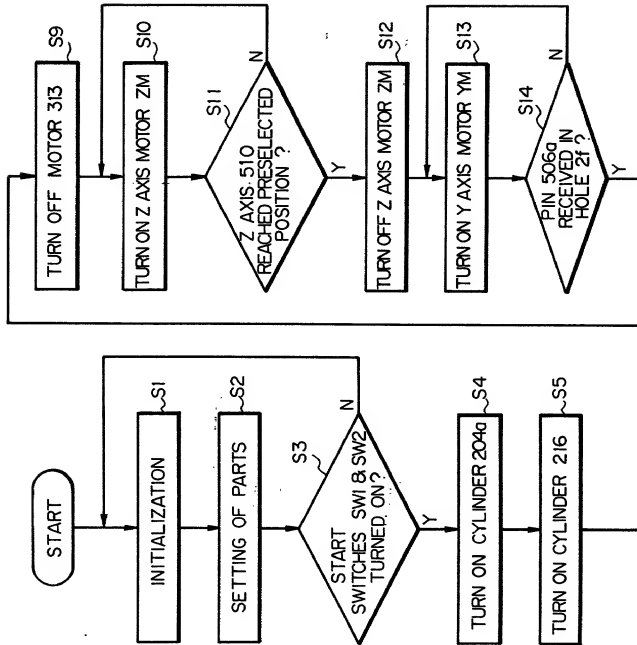


Fig. 5B

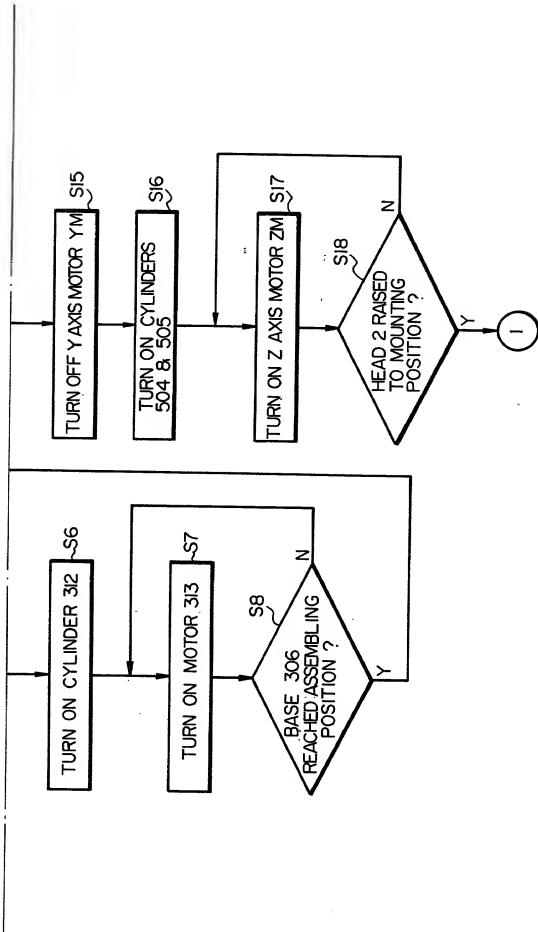


Fig. 6A

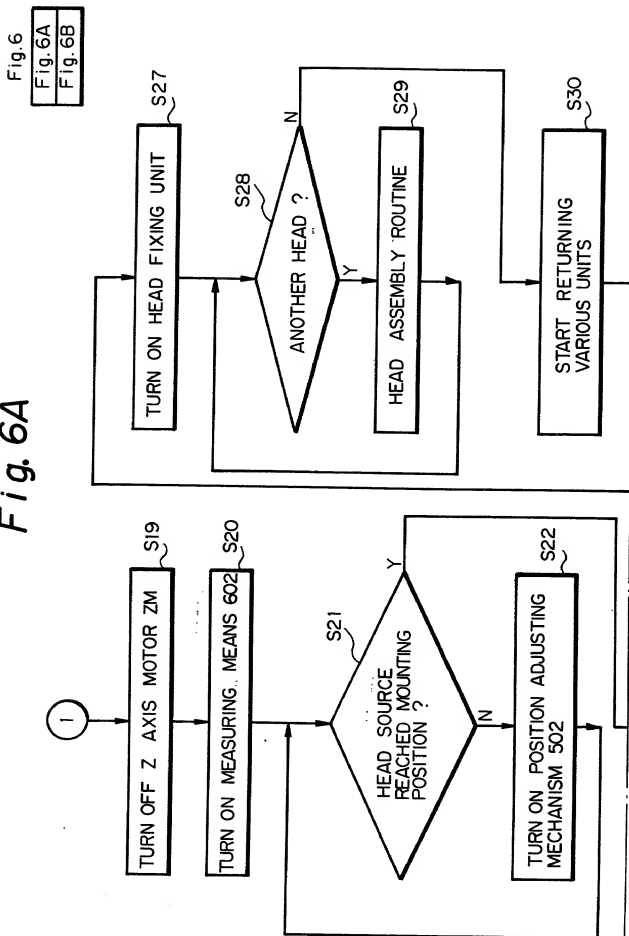


Fig. 6B

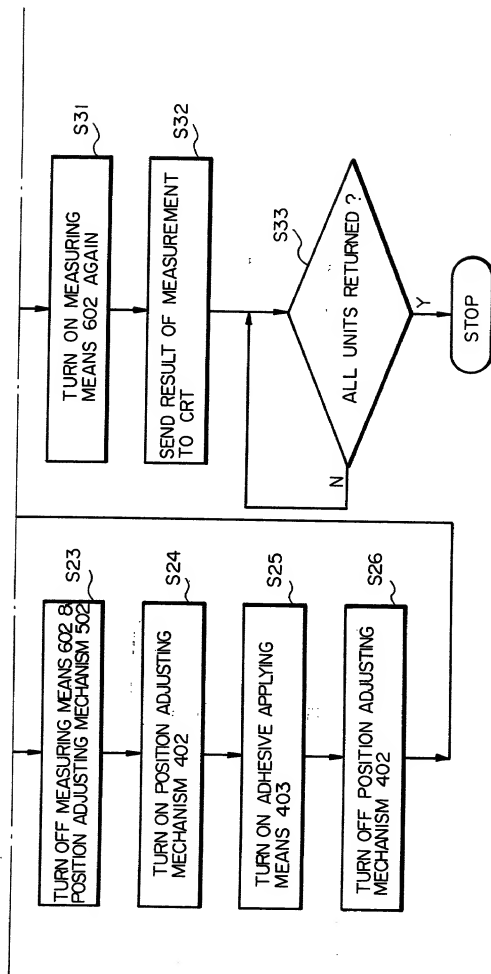




Fig. 7

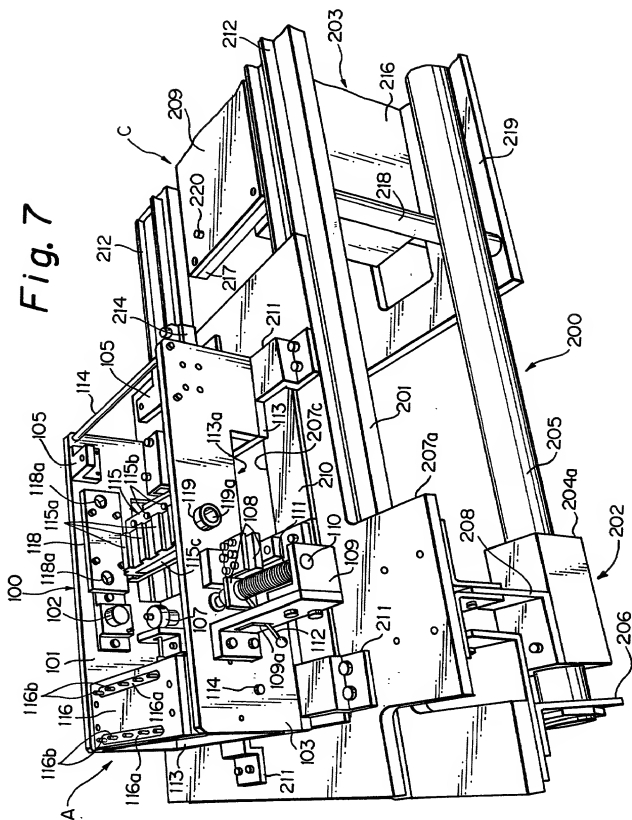
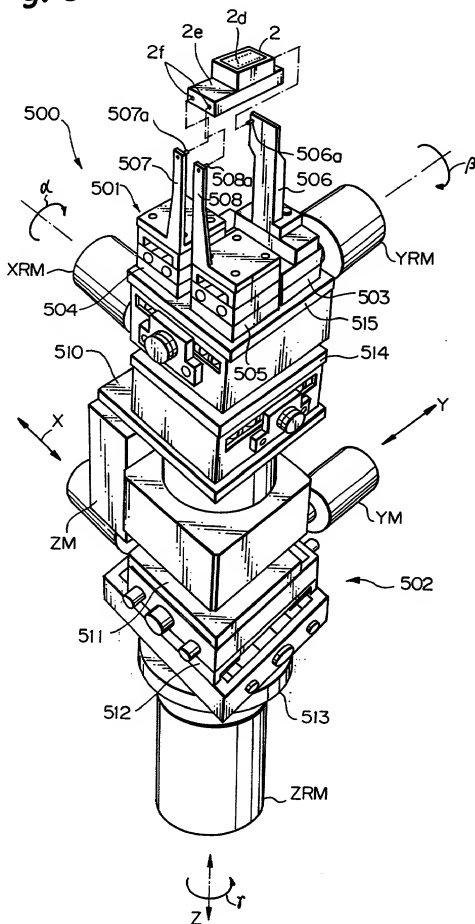
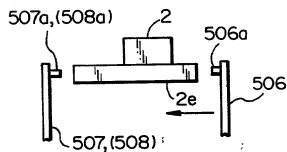




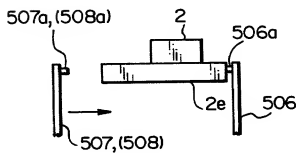
Fig. 9



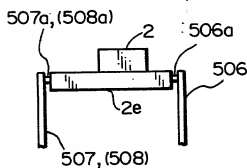
*Fig. 10A*



*Fig. 10B*



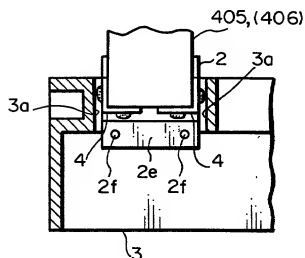
*Fig. 10C*





This diagram shows a cross-sectional side view of a semiconductor device assembly. At the base is a substrate 116 with several rectangular pads 116a and 116b. On top of these pads are vertical structures 4 and 116b. A central component 407 is mounted on pad 116a. Above it is a larger block 408, which has a circular feature 409b on its left side. To the right of 408 is another block 407. A curved arrow labeled 'c' indicates a path from the top of 408 towards the center. Various other components are labeled with numbers like 401, 402, 403, 404, 405, 406, 409, 410, 411, 412, 413, 414, 415, 416, 417, 418, 419, 420, 421, 422, 423, 424, 425, 426, 427, 428, 429, 430, 431, 432, 433, 434, 435, 436, 437, 438, 439, 440, 441, 442, 443, 444, 445, 446, 447, 448, 449, 450, 451, 452, 453, 454, 455, 456, 457, 458, 459, 460, 461, 462, 463, 464, 465, 466, 467, 468, 469, 470, 471, 472, 473, 474, 475, 476, 477, 478, 479, 480, 481, 482, 483, 484, 485, 486, 487, 488, 489, 490, 491, 492, 493, 494, 495, 496, 497, 498, 499, 500.

*Fig. 13A*



*Fig. 13B*

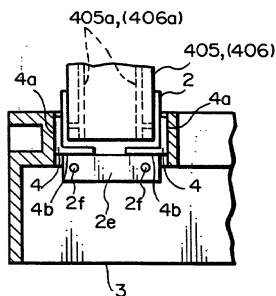


Fig. 14

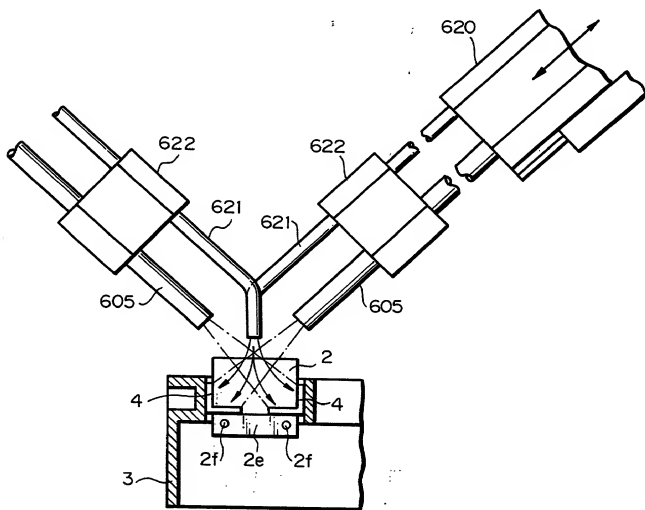




Fig. 15

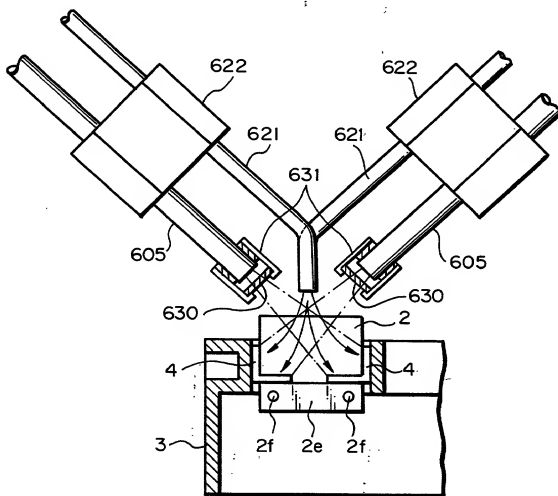


Fig. 16A

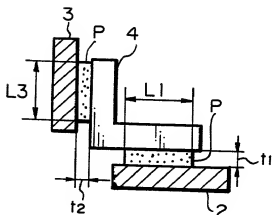


Fig. 16B

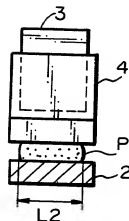


Fig. 16C

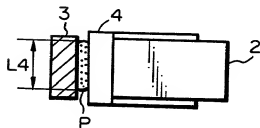


Fig. 17A

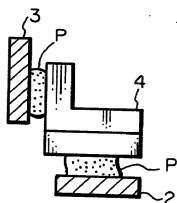


Fig. 17B

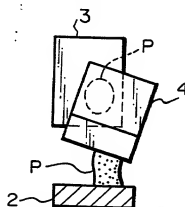


Fig. 18

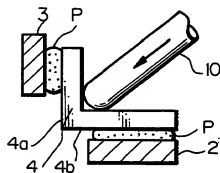


Fig. 19A

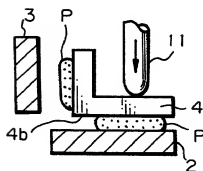


Fig. 19B

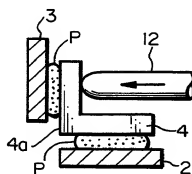


Fig. 20

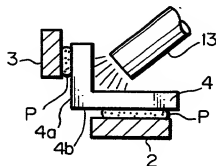


Fig. 21A

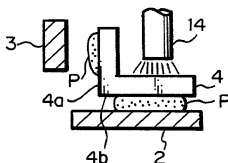


Fig. 21B

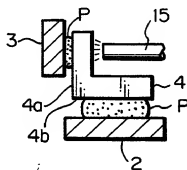


Fig. 22

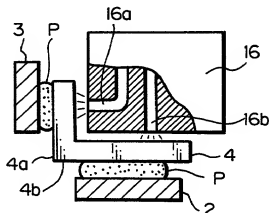


Fig. 23A

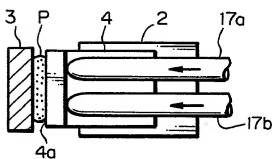


Fig. 23B

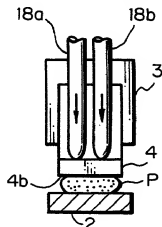


Fig. 24A

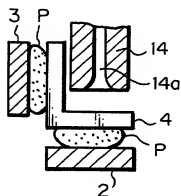


Fig. 24B

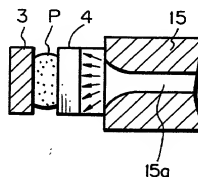


Fig. 25

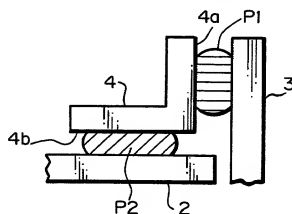


Fig. 26

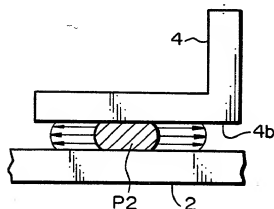


Fig. 27

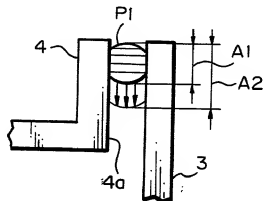


Fig. 28

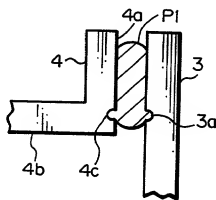


Fig. 29

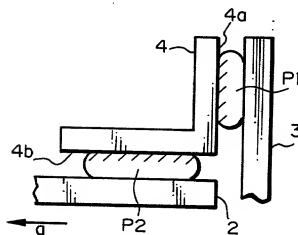


Fig. 30

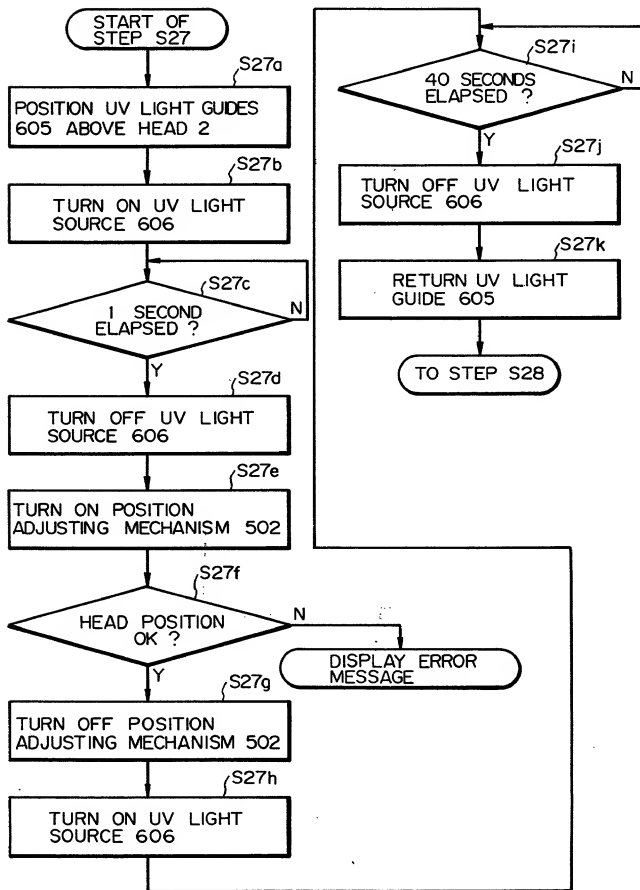


Fig. 31A

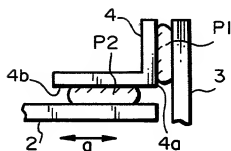


Fig. 31B

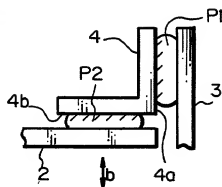


Fig. 32A

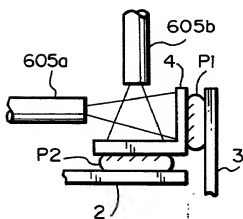


Fig. 32B

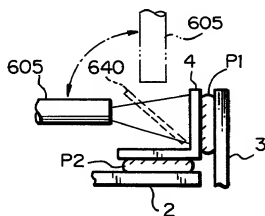


Fig. 33

